



Attorney's Docket No.: 07917-135001

1636

TECH CENTER 1600/2900

SEP 19 2002

RECEIVED

#5  
M. G. J.  
6/24/13

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Vacanti *et al.*  
Serial No. : 10/020,778  
Filed : October 30, 2001  
Title : ISOLATION OF SPORE-LIKE CELLS FROM TISSUES EXPOSED TO  
EXTREME CONDITIONS

Art Unit : Unknown  
Examiner : Unknown

Commissioner for Patents  
Washington, D.C. 20231



INFORMATION DISCLOSURE STATEMENT

Applicant submits the references listed on the attached form PTO-1449, copies of which are enclosed.

A copy of the following reference will be provided at a later date:

*Sutton et al., Transplantation, 29:845-847, 1997*

This statement is being filed within three months of the filing date of the application or before the receipt of a first Office action on the merits.

CERTIFICATE OF MAILING BY FIRST CLASS MAIL

I hereby certify under 37 CFR §1.8(a) that this correspondence is being deposited with the United States Postal Service as first class mail with sufficient postage on the date indicated below and is addressed to the Commissioner for Patents, Washington, D.C. 20231.

Date of Deposit September 3, 2002  
Signature Mary E. Jacoby  
Typed or Printed Name of Person Signing Certificate Mary Elizabeth Jacoby

Applicant : Vacanti et al.  
Serial No. : 10/020,778  
Filed : October 30, 2001  
Page : 2

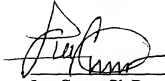
Attorney's Docket No.: 07917-135001

Please apply any charges or credits to Deposit Account No. 06-1050.

Respectfully submitted,

Date:

September 3, 2002



Lee Crews, Ph.D.  
Reg. No. 43,567

Fish & Richardson P.C.  
225 Franklin Street  
Boston, Massachusetts 02110-2804  
Telephone: (617) 542-5070  
Facsimile: (617) 542-8906



Sheet 1 of 5

Substitute Form PTO-1449  
(Modified)

U.S. Department of Commerce  
Patent and Trademark Office

Attorney's Docket No.  
07917-135001

Application No.  
10/020,778

### Information Disclosure Statement by Applicant

(Use several sheets if necessary)

(37 CFR §1.98(b))

Applicant  
*Vacanti et al.*

Filing Date  
October 30, 2001

Group Art Unit

### U.S. Patent Documents

Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AA	4,880,622	11/1989	Allcock et al.			
	AB	4,440,921	04/1984	Allcock et al.			
	AC	4,495,174	01/1985	Allcock et al.			
	AD	5,589,376	12/1996	Anderson et al.			
	AE	5,780,300	07/1998	Artavanis-Tsakonas et al.			
	AF	5,667,778	09/1997	Atala			
	AG	5,192,326	03/1993	Bao et al.			
	AH	5,834,029	11/1998	Bellamkonda et al.			
	AI	5,486,359	01/1996	Caplan et al.			
	AJ	5,830,651	11/1998	Cauley et al.			
	AK	5,786,216	07/1998	Dionne et al.			
	AL	5,405,366	04/1995	Fox et al.			
	AM	5,082,670	01/1992	Gage et al.			
	AN	5,762,926	06/1998	Gage et al.			
	AO	4,846,835	07/1998	Grande			
	AP	5,709,854	01/1998	Griffith-Cima et al.			
	AQ	4,474,751	10/1984	Haslam et al.			
	AR	4,474,752	10/1984	Haslam et al.			
	AS	4,474,753	10/1984	Haslam et al.			
	AT	4,478,822	10/1984	Haslam et al.			
	AU	5,994,754	11/1999	Hayashi et al.			
	AV	5,126,141	06/1992	Henry			

RECEIVED  
 SEP 6 2002  
 JTECH CENTER 1600/2900

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

Substitute Disclosure Form (PTO-1449)



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07917-135001	Application No. 10/020,778
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)		Applicant <b>Vacanti et al.</b>	
		Filing Date October 30, 2001	Group Art Unit
(37 CFR §1.98(b))			

U.S. Patent Documents							
Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date If Appropriate
	AW	5,529,914	06/1996	Hubbell et al.			
	AX	5,410,016	04/1995	Hubbell et al.			
	AY	5,753,506	05/1998	Johe			
	AZ	5,512,600	04/1996	Mikos et al.			
	BA	5,514,378	05/1996	Mikos et al.			
	BB	5,696,175	12/1997	Mikos et al.			
	BC	5,443,950	08/1995	Naughton et al.			
	BD	5,578,485	11/1996	Naughton et al.			
	BE	5,593,974	01/1997	Rosenberg et al.			
	BF	4,191,747	03/1980	Scheicher			
	BG	5,795,790	08/1998	Schinstine et al.			
	BH	5,294,446	03/1994	Schlameus et al.			
	BI	5,575,815	11/1996	Slepian et al.			
	BJ	5,061,620	10/1991	Tsukamoto et al.			
	BK	5,041,138	08/1991	Vacanti et al.			
	BL	5,716,404	02/1998	Vacanti et al.			
	BM	5,855,610	01/1999	Vacanti et al.			
	BN	5,804,178	09/1998	Vacanti et al.			
	BO	5,567,612	10/1996	Vacanti et al.			
	BP	5,736,372	04/1998	Vacanti et al.			
	BQ	5,759,830	06/1998	Vacanti et al.			

RECEIVED  
 SEP 10 2002  
 TECH CENTER 1600/2800

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449  
(Modified)U.S. Department of Commerce  
Patent and Trademark OfficeAttorney's Docket No.  
07917-135001Application No.  
10/020,778**Information Disclosure Statement  
by Applicant**

(Use several sheets if necessary)

(37 CFR §1.98(b))

Applicant  
Vacanti *et al.*Filing Date  
October 30, 2001

Group Art Unit

**U.S. Patent Documents**

Examiner Initial	Desig. ID	Patent Number	Issue Date	Patentee	Class	Subclass	Filing Date is Appropriate
	BR	5,770,193	06/1998	Vacanti <i>et al.</i>			
	BS	5,770,417	06/1998	Vacanti <i>et al.</i>			
	BT	5,300,295	04/1994	Viegas <i>et al.</i>			
	BU	5,306,501	04/1994	Viegas <i>et al.</i>			
	BV	5,318,780	06/1994	Viegas <i>et al.</i>			
	BW	5,071,644	12/1191	Viegas <i>et al.</i>			
	BX	5,277,911	01/1994	Viegas <i>et al.</i>			
	BY	5,292,516	03/1994	Viegas <i>et al.</i>			
	BZ	5,298,260	03/1994	Viegas <i>et al.</i>			
	CA	4,997,443	03/1991	Walthall <i>et al.</i>			
	CB	5,750,376	05/1998	Weiss <i>et al.</i>			
	CC	5,851,832	12/1998	Weiss <i>et al.</i>			
	CD	5,292,655	03/1994	Willie, Jr., <i>et al.</i>			
	CE	4,060,081	11/1977	Yannas <i>et al.</i>			
	CF	5,827,735	10/1998	Young <i>et al.</i>			

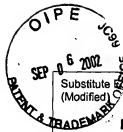
**Foreign Patent Documents or Published Foreign Patent Applications**

Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	CG	WO 93/16687	02/1993	PCT International				
	CH	WO 93/24627	12/1993	PCT International				
	CI	WO 94/25079	11/1994	PCT International				
	CJ	WO 94/25080	11/1994	PCT International				

Examiner Signature

Date Considered

EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.



Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07917-135001	Application No. 10/020,778
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)		Applicant <i>Vacanti et al.</i>	RECEIVED SEP 6 2002 PATENT OFFICE 160029
		Filing Date October 30, 2001	

Foreign Patent Documents or Published Foreign Patent Applications								
Examiner Initial	Desig. ID	Document Number	Publication Date	Country or Patent Office	Class	Subclass	Translation	
							Yes	No
	CK	WO 96/40304	12/1996	PCT International				
	CL	WO 97/41208	11/1997	PCT International				
	CM	WO 98/23761	06/1998	PCT International				
	CN	WO 98/30678	07/1998	PCT International				
	CO	EP 0 361 957	04/1990	EPO				

Other Documents (include Author, Title, Date, and Place of Publication)		
Examiner Initial	Desig. ID	Document
	CP	Burke et al., "Successful Use of a Physiologically Acceptable Artificial Skin in the Treatment of Extensive Burn Injury", <i>Ann. Surg.</i> <u>194</u> :413-428, 1981.
	CQ	Cornelius et al., "In Vitro-Generation of Islets in Long-Term Cultures of Pluripotent Stem Cells From Adult Mouse Pancreas", <i>Hormone Metabol. Res.</i> <u>29</u> :271-277, 1997.
	CR	Craig et al., "In Vivo Growth Factor Expansion of Endogenous Subependymal Neural Precursor Cell Populations in the Adult Mouse Brain", <i>J. Of Neurosci.</i> <u>16</u> :2649-2658, 1996.
	CS	Davis et al., "A Self-Renewing Multipotent Stem Cell in Embryonic Rat Cerebral Cortex", <i>Nature</i> , <u>372</u> :263-269, 1994.
	CT	Farriol et al., "Epidermal growth factor excretion in burned rats", <i>Burns</i> <u>20</u> :496-498, 1994.
	CU	Frederiksen et al., "Proliferation and Differentiation of Rat Neuroepithelial Precursor Cells In Vivo", <i>J. Of Neurosci.</i> <u>8</u> :1144-1151, 1988.
	CV	Feringa et al., "Regeneration of Corticospinal Axons in the Rat", <i>Annals Of Neurology</i> , <u>2</u> :315-321, 1977.
	CW	Gage et al., "Survival and Differentiation of Adult Neuronal Progenitor Cells Transplanted to the Adult Brain", <i>Proc. Natl. Acad. Sci. USA</i> , <u>92</u> :11879-11883, 1995.
	CX	Hansbrough, "Current Status of Skin Replacement for Coverage of Extensive Burn Wounds", <i>J. Trauma</i> , <u>30</u> (12):S155-S162, 1990.
	CY	Houle et al., "Bridging a Complete Transection Lesion of Adult Rat Spinal Cord with Growth Factor-Treated Nitrocellulose Implants", <i>J. Of Neural Transplantation &amp; Plasticity</i> , <u>5</u> :115-124, 1994.
	CZ	Hutchison et al., "Global Transposon Mutagenesis and a Minimal Mycoplasma Genome", <i>Science</i> , <u>286</u> :2165-2169, 1999
	DA	Lachyankar et al., "Embryonic Precursor Cells that Express Trk Receptors: Induction of Different Cell Fates by NGF, BDNF, NT-3, and CNTF", <i>Experimental Neurology</i> , <u>144</u> :350-360, 1997.
	DB	Langer et al., "Tissue Engineering", <i>Science</i> , <u>260</u> :920-926, 1993.
	DC	Lindsell et al., "Jagged: A Mammalian Ligand That Activates Notch1", <i>Cell</i> <u>80</u> :909-917, 1995.

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	

Substitute Form PTO-1449 (Modified)	U.S. Department of Commerce Patent and Trademark Office	Attorney's Docket No. 07917-135001	Application No. 10/020,778
<b>Information Disclosure Statement by Applicant</b> (Use several sheets if necessary)		Applicant Vacanti <i>et al.</i>	
		Filing Date October 30, 2001	Group Art Unit

(37 CFR §1.98(b))


**Other Documents (include Author, Title, Date, and Place of Publication)**

Examiner Initial	Desig. ID	Document
	DD	Marshall, et al., "A Critical Assessment of the Use of Microculture Tetrazolium Assays to Measure Cell Growth and Function", <i>Growth Regulation</i> , 5:69-84, 1995
	DE	Moore et al., "Vascular function and tissue injury in murine skin following hyperthermia and photodynamic therapy, alone and in combination", <i>Br. J. Cancer</i> 66:1037-1043, 1992.
	DF	Morshhead et al., "Neural Stem Cells in the Adult Mammalian Forebrain: A Relatively Quiescent Subpopulation of Subependymal Cells", <i>Neuron</i> , 13:1071-1082, 1994.
	DG	Nerem, "Cellular Engineering", <i>Ann. Biomed. Eng.</i> 19:529-545, 1991.
	DH	Raszka et al., "The Use of Hyaluronidase in the Treatment of Intravenous Extravasation Injuries", <i>J. Perinatol.</i> 10:146-149, 1990.
	DI	Ray et al., "Proliferation, Differentiation, and Long-Term Culture of Primary Hippocampal Neurons", <i>Proc. Natl. Acad. Sci. USA</i> , 90:3602-3606, 1993.
	DJ	Ray et al., "Spinal Cord Neuroblasts Proliferate in Response to Basic Fibroblast Growth Factor", <i>J. Of Neurosci.</i> , 14:3548-3564, 1994.
	DK	Reynolds et al., "Clonal and Population Analyses Demonstrate that an EGF-Responsive Mammalian Embryonic CNS Precursor is a Stem Cell", <i>Developmental Biology</i> , 175:1-13, 1996.
	DL	Reynolds et al., "Generation of Neurons and Astrocytes from Isolated Cells of the Adult Mammalian Central Nervous System", <i>Science</i> , 255:1707-1710, 1992.
	DM	Reynolds et al., "A Multipotent EGF-Responsive Striatal Embryonic Progenitor Cell Produces Neurons and Astrocytes", <i>The J. Of Neurosci.</i> , 12:4565-4574, 1992.
	DN	Roughneen et al., "Isolation of Rat Pancreatic Islets By Ductal Injection of Collagenase", <i>Transplantation</i> , 42:689-691, 1986
	DO	Shihabuddin et al., "FGF-2 Is Sufficient to Isolate Progenitors Found in the Adult Mammalian Spinal Cord", <i>Experimental Neurology</i> , 148:577-586, 1997.
	DP	Shihabuddin et al., "The Adult CNS Retains the Potential to Direct Region-Specific Differentiation of a Transplanted Neuronal Precursor Cell Line", <i>J. Of Neurosci.</i> , 15:6666-6678, 1995.
	DQ	Shihabuddin et al., "Induction of Mature Neuronal Properties in Immortalized Neuronal Precursor Cells Following Grafting into the Neonatal CNS", <i>J. Of Neurocytology</i> , 25:101-111, 1996.
	DR	Stanton et al., "The Growth of Chondrocytes Using Gelfoam as a Biodegradable Scaffold", <i>J. Of Materials Science: Materials In Medicine</i> 6:739-744, 1995.
	DS	Suhonen et al., "Differentiation of Adult Hippocampus-Derived Progenitors into Olfactory Neurons in Vivo", <i>Nature</i> , 383:624-627, 1996.
	DT	Sutton et al., " ", <i>Transplantation</i> , 42:689-691, 1986
	DU	Taylor et al., "Widespread Engraftment of Neural Progenitor and Stem-Like Cells Throughout the Mouse Brain", <i>Transplantation Proceedings</i> , 29:845-847, 1997.
	DV	Weiss et al., "Multipotent CNS Stems Cells are Present in the Adult Mammalian Spinal Cord and Ventricular Neuroaxis", <i>J. Of Neurosci.</i> , 16:7599-7609, 1996.
	DW	Yannas et al., "Wound Tissue Can Utilize a Polymeric Template to Synthesize a Functional Extension of Skin", <i>Science</i> , 215:174-176, 1982.

Examiner Signature	Date Considered
EXAMINER: Initials citation considered. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.	